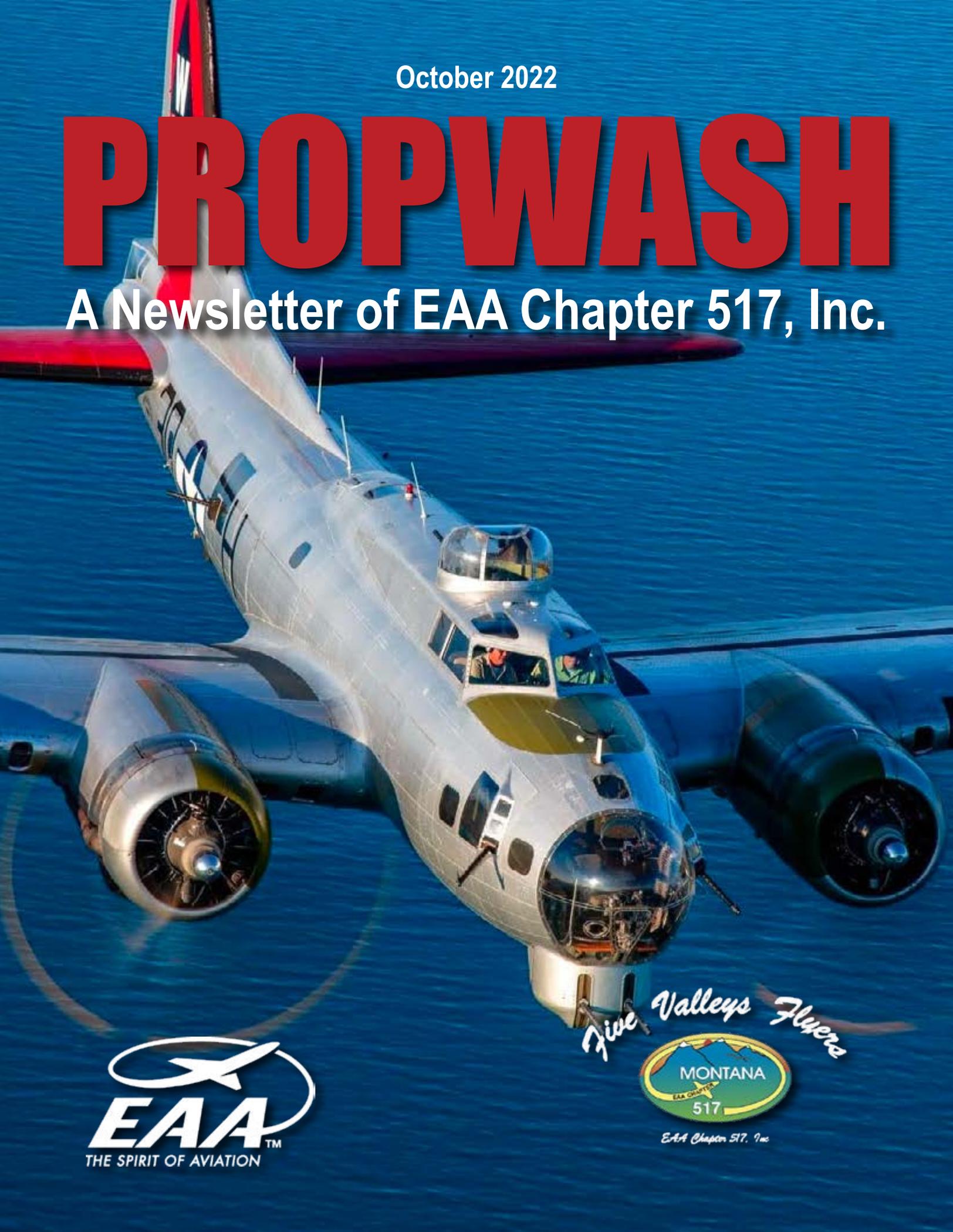


October 2022

PROPWASH

A Newsletter of EAA Chapter 517, Inc.



Five Valleys Flyers



EAA Chapter 517, Inc

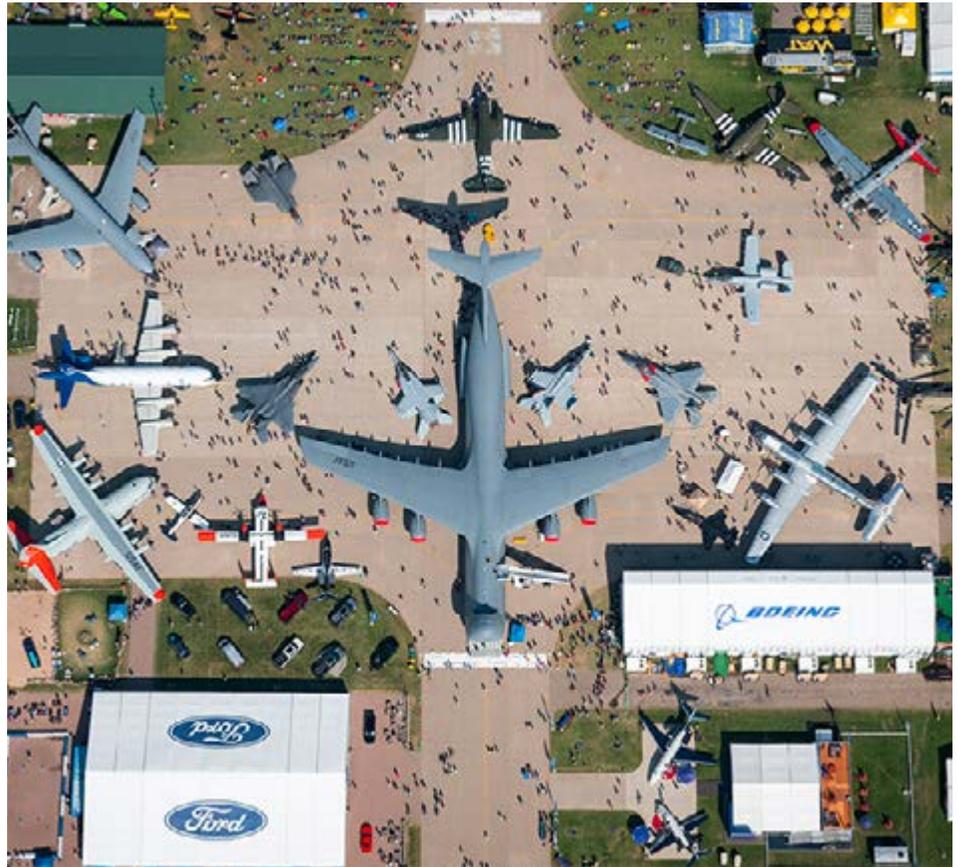
From the Chapter President

By Ed Lovrien

Hope everyone is doing great and enjoying the fall. We have had another busy month and I find that the older I get, the faster the months go. We have flown Young Eagles in Missoula twice, and Superior once. We flew a lot of kids and everyone was very happy and excited about it. We have a great group of pilots working to make it all come together and Ray and Ralph have been working very, very hard to keep things running. We would like to get some help for Ralph on the ground coordination. My son Kellen has been helping him some but he needs another person or two to keep things running smoothly. Please contact Ray if you can help.

The airport hamburger lunch went very well. We had a lot of attendees and a huge thanks to Bruce for the use of his hangar. We got to see the airport fire trucks and even got a demo of all the different uses of the boom on front. Man, can that thing put out the water! Impressive. I have heard some rumors about next year's airport feast. If it comes together, it will be one for the record books and one not to miss.

The raffle is coming into its last two months. We really need to get more tickets sold. There are a huge amount of prizes and if you just email your friends the sheet I made with the pictures and prize list (page 7 of this newsletter), they will help support the group and the chances of winning are very good because we have not sold 1/5 of the tickets we planned on. Please take a few minutes and email your friends and neighbors about it. It doesn't have to be a hard core sell, just mention it and see if you can get some support.



I have been struggling with a decision regarding the hangar. We are going to have to make the hangar nut free. I have a son who is deathly allergic to them, and I am sure there are others. I haven't ever pushed it and he is always careful, but he ended up in the hospital two months ago and we learned some things about it that scared the hell out of me. If someone is eating peanuts or something with peanut in it, and touches a chair, or a table or anything else, the oil in it can stay on that surface and takes three to five scrubbing to get it off. If we were to help set up for breakfast and move the tables and chairs and get it on him, and then get it on what he is eating, it could kill him before we could get him to the hospital. I have struggled with the decision, but I

would make the same one for anyone who has a kid with an allergy like that, so please in the future, when we do food items at the hangar, make sure nothing is made with nuts or brought that has nuts in it. The other groups that meet there have bar nuts all the time and those are also being taken out. The groups have had discussions and are cleaning them out and I will wash the areas well. Thanks for your support on this and I know people don't think about it when they aren't affected, but we will try to have a reminder with information sent out.

Hope to see you all at one of our breakfasts. If not, I am sure we will have another good time at the hangar and many more to come. See you all soon!

EAGLE Initiative making progress

By EAA

The Eliminate Aviation Gasoline Lead Emissions (EAGLE) initiative executive committee named Robert Orlislagers as senior coordinator of the initiative, announced that the International Council of Air Shows (ICAS) and National Association of State Aviation Officials (NASAO) have joined EAGLE's executive committee, and formally introduced the leads for the initiative's key focus pillars.

"After decades of trial and error, we are on the threshold of an unleaded future for general aviation," said Billy Nolen, acting administrator for the Federal Aviation Administration. "As the EAGLE initiative moves forward, strong leadership, and an unwavering focus on safety will be crucial."

Prior to joining EAGLE, Orlislagers served in numerous airport leadership positions, focusing on various priorities including economic development, environmental sustainability, aviation security, and workforce development. He participated in several National Academies of Sciences, Airport Cooperative Research Program studies, including "Options for Reducing Lead Emissions from Piston-Engine Aircraft" published in 2021. Under his watch, Centennial Airport became the first general aviation airport in Colorado to adopt a sustainability program, earning the state's gold standard.

"Robert brings a wealth of subject matter knowledge and expertise to EAGLE, and we look forward to having him lead this important initiative as it continues to gain momentum. He is determined to see EAGLE succeed in its work across



its four pillars to ensure a viable and safe transition to an unleaded future state for piston-engine aircraft," said the EAGLE executive committee.

EAGLE's executive committee, which oversees the progress and direction of the initiative and consists of leaders from the FAA and aviation and petroleum groups, was pleased to welcome ICAS and NASAO as committed stakeholders. ICAS and NASAO will be joining the Aircraft Owners and Pilots Association (AOPA), American Association of Airport Executives (AAAE), American Petroleum Institute (API), Experimental Aircraft Association (EAA), General Aviation Manufacturers Association (GAMA), Helicopter Association International (HAI), National Air Transportation Association (NATA), and National Business Aviation Association (NBAA) as executive committee members.

"This is a vital initiative for general aviation and the air show community is proud to be a part of it," said John Cudahy, president of the International Council of Air Shows. "We intend to use our bully pulpit at hundreds of air shows every year to let millions of spectators know about the important

work underway to eliminate lead in aviation fuel by 2030."

"Although NASAO has supported the EAGLE Initiative from its inception, we are pleased to now formally join the stakeholders partnered in this critical effort," said Greg Pecoraro, president of the National Association of State Aviation Officials. "State aviation agencies have long understood the vital need for an alternative to 100LL and as leaders in planning for state airport systems, they look forward to assisting airports prepare for a lead-free future."

The executive committee also formally announced the leads of the initiative's four key pillars – Regulatory and Policy, Unleaded Fuel Testing and Qualification, Research and Development, and Supply Chain Infrastructure and Deployment. The Regulatory and Policy pillar is being led by Ralph Lovinelli, who is manager of the Emissions Division in the FAA Office of Environment and Energy. The Unleaded Fuel Testing and Qualification pillar is being led by Maria Di Pasquantonio, who is manager of the Research Coordination/Alternative Fuels Program at the FAA Aircraft Certification Service. The Research and Development pillar is being led by Tim Smyth, who before retirement served as manager of the FAA's Chicago Aircraft Certification Office (ACO). The Supply Chain Infrastructure and Deployment pillar is being led by Ryan Manor, who retired from the petroleum industry after 32-years, with a significant portion of that in aviation fuels business.

"The collaborative work being accomplished through EAGLE's four

pillars supports the safe expansion and acceleration of actions and policies necessary for a viable high-octane unleaded replacement for the piston-engine fleet. We are grateful for the work that these leads have already put into the initiative and are confident that their work going forward will provide for a safe transition without compromising the existing transportation infrastructure system, aviation safety, or the economic and broader public benefits of general aviation,” said the EAGLE executive committee.

While EAGLE’s focus is on helping bring unleaded solutions to the nation’s airports, it also

encourages airports and airport sponsors to keep this transition safe and secure by providing a supply of 100LL to be available for aircraft that need the higher octane to fly safely. These aircraft include those performing such vital missions as search and rescue, disaster relief, law enforcement, and agricultural support.

Since its formation in February, EAGLE has held two stakeholder meetings and established groups which have been actively working on the initiative’s four key pillars. Currently, Afton Chemical/Phillips66 and LyondellBasell/VP-Racing are advancing through the EAGLE

fleet authorization testing and evaluation process while others are working through the FAA STC certification process like Swift Fuels and GAMI’s G100UL, which recently received STC approval. The initiative and its stakeholders remain steadfast in meeting the challenges of establishing a viable and safe replacement for 100LL avgas by the end of 2030. EAGLE is also working on initiatives to reduce the impact of lead before 2030.

For more information on EAGLE, visit faa.gov/unleaded and aopa.org/100UL.

EAA B-17 rides through Hurricane Ian

By EAA

EAA’s B-17 Aluminum Overcast, which has been based in Punta Gorda, Florida, for the past year while awaiting repairs to its wing structure, apparently sustained only minor damage as Hurricane Ian came ashore in that area of the Gulf Coast earlier this week and caused tremendous damage in that region.

“We were incredibly fortunate that the aircraft did not suffer any major damage, from what early indications tell us,” said Jack J. Pelton, EAA CEO and chairman of the board. “Our thanks to Arcadia Aerospace Industries for looking after the airplane and taking all the precautions they could prior to the storm’s landfall and during the event.”

The hangar where the B-17 was parked did suffer substantial damage, but early inspection shows only one piece of structure struck the B-17’s tail section, which is repairable. The fuselage was not damaged from initial inspection done on-site, although there is a great deal of



debris in the hangar that must be cleaned up.

“The first priority is ensuring the hangar structure is safe to enter before sending our people there to further inspect the airframe,” Pelton said. “We don’t have an exact timeline for that to occur, but we are very fortunate compared to the very sad loss of life and property that occurred throughout southwest Florida during the hurricane. Our thoughts are with all in that area, including our many EAA members and friends.”

Aluminum Overcast has been

in Punta Gorda since March 2021, when a routine pre-flight inspection revealed a crack emanating from the left sheer web, which is a secondary support structure for the wing. The only way to repair that is by removing the wing. The repair itself is not overly complicated, but getting to it is. As the wing was removed, EAA teams noticed other things that would be best served by repairing them at the same time. The proper parts for the vintage World War II bomber are currently being specially manufactured for the repairs.

Transition to unleaded avgas – What does the future hold, how much work remains?



By EAA

On September 1, the FAA issued an Approved Model List Supplemental Type Certificate (AML STC) to General Aviation Modifications Inc. (GAMI) for their G100UL unleaded avgas. It represents the first FAA approval of a high-octane unleaded fuel for general aviation aircraft and moves the industry a step closer to an unleaded future. GAMI's STC opens the door to the complex work that remains to create a commercial pathway for this, and other unleaded fuels under development, to reach the marketplace and become available for purchase.

On the heels of this announcement, many are asking what the path to an unleaded future looks like. Questions concerning proposed high-octane unleaded fuels involve availability, production

and distribution, operational differences or limitations, and price. In the meantime, concern over the continued availability of 100LL and its likely future phase-out persist.

Meanwhile, the Environmental Protection Agency (EPA) is in the final stages of coordinating a draft endangerment finding for lead emissions from piston aircraft. This is the first of multiple regulatory steps that will unfold over the coming years that will likely lead to an EPA emissions standard for lead from aircraft and FAA regulation that eventually phases out the use of leaded.

GAMI's Path to Deployment

GAMI has announced that they are collaborating with Avfuel Corporation, utilizing their logistics and distribution experience, to

develop a network needed to facilitate the fuel's distribution. According to early communications by GAMI and Avfuel, "G100UL avgas will expand nationally over a period of a few years at a pace driven by the rate at which the production and distribution infrastructure can be put in place." Regarding production, GAMI states, "Our arrangement is that any qualified refiner or blender of existing aviation fuels will be eligible to produce and sell it subject to the quality assurance requirements that the FAA has approved." So, progress in the production and distribution of the GAMI fuel will depend upon agreements the company reaches with fuel refiners, distributors, and others. These will be business decisions by all of the involved stakeholders.

Price is yet to be determined but will likely be more than avgas. When discussing the price of G100UL,

GAMI estimates that their fuel will cost more than 100LL, but the gap could close as production increases and the market adapts. This price difference will be a critical consideration for pilots and aircraft owners where G100UL and 100LL compete in the same market. GAMI notes that this price differential could be offset by the reduced maintenance costs associated with burning an unleaded fuel.

In addition to fuel production and distribution matters, aircraft and engine manufacturers will be seeking information and data necessary to satisfy their own business, liability, and product support considerations. It is anticipated that some will want to evaluate and test the fuel themselves as part of reaching their conclusions. All of this leads to the understanding that evaluation, production, and broad distribution will take time and require business decisions by many stakeholders.

Additional Unleaded Fuel Candidates

In addition to GAMI, three other high-octane unleaded fuels are in development and are working toward FAA approval or authorization. Each of these fuels attempt to tackle the need for high-octane aviation fuel using differing chemical approaches. As with all unleaded fuel technologies explored to date, each has unique advantages and disadvantages relative to one another. In the end, it is in the best interest of the general aviation community to have more than one high-octane unleaded fuel gain FAA approval and compete for the market based upon technical, safety, production, and economic merits.

Swift Fuels Inc., an Indiana-based company, already supplies its 94-octane unleaded fuel to a limited but growing number of airports for those aircraft that can use a lower

octane fuel and hold an STC for the fuel. The company is currently working through the FAA STC approval process on its 100-octane unleaded avgas product and has said that it hopes to have a fleet solution ready to deploy for North America by the end of 2024.

Partnerships between Afton Chemical/Phillips 66 and Lyondell/VP Racing have each developed high-octane fuels as potential replacements for 100LL. Rather than seeking STC approval from the FAA, both of these partnerships participate in the Eliminate Aviation Gasoline Lead Emissions (EAGLE) program for the evaluation and eventual authorization of their fuels. EAGLE is a government-industry partnership that brings together aircraft and engine manufacturers, fuel producers and distributors, airport operators, communities supporting general aviation airports, and environmental experts with the goal of transitioning to lead-free aviation fuels for piston-engine aircraft by the end of 2030. EAGLE's work focuses on critical areas of activity necessary to protect the interests of general aviation while facilitating a safe transition to an unleaded replacement avgas without adversely affecting the existing piston-engine fleet. It also stands ready to assist companies who have sought FAA approval by way of the STC pathway to deploy their fuels into the marketplace.

Future of 100LL – EPA and Local Pressures

The EPA is in the final stages of coordinating a draft endangerment finding for lead emissions from piston aircraft that use leaded aviation gasoline. A proposed finding of endangerment is just the first of several regulatory steps that will be taken in the coming years that will most likely conclude with the eventual elimination of leaded

avgas. In the meantime, as unleaded alternatives continue to be examined and their deployment carried out, EAA and the aviation industry are committed to ensuring the continued availability of 100LL throughout the transition to ensure safety and continued viability of the existing aircraft fleet.

The continued use of leaded avgas through the transition period will likely attract opposition and result in growing pressure on airports and operators at the state and local level. Most recently, California's Santa Clara County has moved to ban the sale of leaded avgas at its two airports, Reid-Hillview Airport (RHV) and San Martin Airport (E16). A well-coordinated and communicated plan for transitioning to a high-octane unleaded avgas is what was needed and that is where EAGLE comes in. This collaborative effort bring all of the stakeholders in aviation, the petroleum industry, and government together to effect a timely, safe, and viable transition away from leaded aviation gasoline. A patchwork of airport-specific requirements leading to inconsistency in what fuels are available would lead to airports that may or may not carry the necessary fuels, thus creating a situation where aircraft could be misfueled, leading to safety and operational concerns.

EAA's Continued Commitment

EAA is committed to facilitating a smart and safe transition to an unleaded fuel that preserves the utility of the existing general aviation fleet and provides a stable and cost-effective fuel supply now and into the future. The ongoing development and expansion of unleaded fuel availability is critical to the long-term success of general aviation.

BUILDER'S REPORT

Bearhawk
Dick Tardiff
Bearhawk Patrol

Rutan
Ed Lovrien
Limo EZ – 50%

Van's RV
John Barba
RV-6

Allan Glen
RV-10 – 40%

<https://airplane.allanglen.com>

Zenith
Duane Felstet
CH-750 – 75%

Ralph Johns
CH650B – 60%

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cburson@gmail.com so this list can be kept current.*

Help out EAA Chapter 517

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<https://www.amazon.com/b?ie=UTF8&node=15576745011>

If you set Missoula EAA Chapter 517 as your charitable donation, every dollar you spend will kick a tiny bit back to the group at no cost to you.

The group does a lot of youth flying scholarships, young eagle flights to help introduce kids to flying, kids camps in the summer, breakfasts and many other flying activities.

Thanks for your help.

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